



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,712	02/20/2004	Jung-Wei Chen	4413-0141P	4168

2292 7590 05/19/2005

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

HESS, DANIEL A

ART UNIT	PAPER NUMBER
----------	--------------

2876

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/781,712

Applicant(s)

CHEN ET AL.

Examiner

Daniel A. Hess

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This action is in response to 8/5/2004 initial filing by the applicants.

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 1:

The term "signal amplifier" appears twice in claim 1. First, it appears in the fifth line, and later it appears in the ninth line. However, it is not clear from the claim whether the signal amplifier in the ninth line is the same as the signal amplifier in the fifth line. The examiner requests clarification, such that either

(a) if these are the same signal amplifier, then the ninth line should read "said signal amplifier" or

(b) if these are not the same signal amplifier, the fifth line should read "a first signal amplifier" and the ninth should read "a second signal amplifier."

Re claim 8:

The claim recites in part, the limitations, "wherein said display screen is a PDA." This is not accurate. This should read, "said display screen is the screen of a PDA."

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang et al. (US 2002/0049876) in view of Shieh et al. (US PG Pub No. 2002/0185533).

Re claim 1: Hwang et al. (see figure 1) teaches many of elements recited in claim 1. The Figure 1 shows a card reader. The card reader is associated with a memory card controller 5, which would have a slot for reading the card [0035-0036], the slot would inherently be in communication with the memory card controller 5. The DAC (digital to analog converter) 8 is a form of a digital signal processor. As recited re claim 8, the local processor 1 can be a USB controller.

This USB controller 1 is connected to the digital signal processor 8, a slot (not shown) via the memory card controller 5, and data storages devices 2 and 3. Audio and video outputs

Art Unit: 2876

are both present in Hwang et al.: see refs. 7 and 8. Regarding the presence of an amplifier, it is standard practice to include amplifiers with such systems as audio output and indeed most speakers, headphones and the like will include an audio amplifier. Indeed speaker 9 of Hwang et al. probably includes a type of signal amplification.

Further (see abstract of Hwang et al.) audio or video data from the card is sent to the audio or video output. Although it is not explicitly recited, signal amplification necessarily takes place after the signal is processed by the DSP (DAC 8) but before audio output. Thus the signal amplifier (which would generally be in the speaker 9) is connected both to the DSP and to audio output. *In fact, as applicant's own claim 11 shows, a speaker can be an amplifier.*

Hwang et al. fails to teach a USB connector.

Shieh et al. teaches (see especially figure 1) a card reader 1 having a USB connector, as evidenced by the USB cable 3.

In view of Shieh's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known USB connector as taught by Shieh in the teachings of Hwang et al. because this can permit data on the card to be downloaded onto a computer (as Shieh et al. illustrates), and edited, displayed or transferred over the Internet. A USB connector would naturally connect to the USB controller.

Re claims 2 and 3: Any such electrical system requires power. In general, a battery and an external power source generally regarded as the only two options in this regard.

Re claim 4: ROM 2 of Hwang et al. constitutes a hard drive.

Re claims 6 and 7: See ref. 7 of Hwang: an LCD is shown.

Art Unit: 2876

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang as modified by Shieh as applied to claim 1 above, in view of Lee (US 6,522,552).

Hwang et al. teaches that memory is present, but fails to teach flash memory.

Lee teaches (see figure 1, ref. 5) an arrangement similar to Hwang et al., such that flash memory is employed.

In view of Lee's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known flash memory of Lee in the teachings of Hwang/Shieh because flash memory is fast in terms of access and cost effective.

Re claim 8: The term PDA is broad since there is no particular set of features that a PDA must have. In this sense, Hwang et al. can be considered a PDA.

Re claim 9: See discussion regarding amplifiers re claim 1 above.

Re claim 10: The examiner notes that speakers are frequently interchangeable with earphones. This examiner's own computer came with speakers connected, and with earphones also included as an option to replace the speakers.

In view of the examiner's own computer configuration, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute earphones for the speaker of Hwang et al. because under certain circumstances (i.e. in the presence of others) it may be inappropriate to use speakers.

Re claim 11: See discussion re claim 1 above.

Art Unit: 2876

***Remarks***

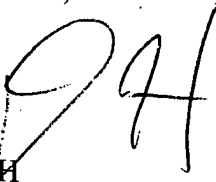
Mura (US 2003/0003976) is also noteworthy, but lacks certain elements. Notably, Mura's configuration (see figure 5) features USB, but not in communication with all the above named elements, and also a full-blown processor is present, rather than a DSP, which is designed to only perform specific functions.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DH

5/12/05

**DANIEL STCYR  
PRIMARY EXAMINER**

